

IN THE CLAIMS:

1. (original) An alloy steel composition which includes the following constituents by weight:

carbon	0.5 – 3.5%
silicon	0.2 – 0.8%
manganese	0.5 – 1.5%
nickel	0.1 – 2.0%
chromium	1.0 – 3.0%
molybdenum	0.1 – 0.5%
copper	0.1 – 2.0%.

2. (original) An alloy steel composition according to claim 1 wherein the percentage composition of nickel is 0.10 – 0.45% by weight.

3. (currently amended) An alloy steel composition according to claim 1 [[or 2]] wherein the percentage composition of copper is 0.10 – 0.45% by weight.

4. (original) A metal casting produced from an alloy steel composition which includes the following constituents by weight:

carbon	0.5 – 3.5%
silicon	0.2 – 0.8%
manganese	0.5 – 1.5%
nickel	0.1 – 2.0%
chromium	1.0 – 3.0%
molybdenum	0.1 – 0.5%
copper	0.1 – 2.0%.

5. (original) A metal casting according to claim 4 which has a substantially pearlitic microstructure throughout its entirety.

6. (currently amended) A metal casting according to claim 4 [[or 5]] wherein the hardness of the casting is greater than 310 HB.

7. (currently amended) A metal casting according to claim 4 [[or 5]] wherein the hardness of the casting is greater than 335 HB.

8. (original) A metal casting according to claim 4 for use in applications, which result in high wear upon the casting.

9. (original) A metal casting according to claim 8 for use as components in autogenous grinding mills, semi-autogenous grinding mills or ball mills.

10. (original) A metal casting according to claim 9 wherein the component is any component subject to wear.

11. (currently amended) A metal casting according to claim 9 [[or 10]] wherein the components are lifter bars, liners, pulp lifters and/or grates.

12. (original) A metal casting according to claim 8 wherein, after about 50 to 100 mm of wear has occurred on the casting, the hardness of the casting is greater than 310 HB and preferably greater than 330 HB.

13. (currently amended) A method of producing a metal casting composed of the alloy steel composition according to ~~any one of claims 1 to 3~~ claim 1 characterised by the steps of:

- i. pouring the molten alloy composition into a metal casting mould;
- ii. cooling the metal casting at ambient temperature; and
- iii. grind casting and gauge to profile.

14. (original) A method according to claim 13 which includes the step of air blasting when the metal casting is greater than 300 mm in thickness.

15. (original) A method according to claim 14 which includes the step of tempering at about 580°C.

16. (original) An alloy steel composition which includes the following constituents by weight:

carbon	0.80 – 0.85%
silicon	0.42 – 0.48%
manganese	0.85 – 0.95 %
nickel	0.32 – 0.38%
chromium	2.05 – 2.25%
molybdenum	0.30 – 0.37%
copper	0.32 – 0.38%.